On-Bill Financing
Overview and Key Considerations for Program Design

AUTHOR
Philip Henderson
Natural Resources Defense Council

On-bill financing programs are a promising way for utilities to help customers invest in energy efficiency improvements, such as adding insulation, installing new lighting, or upgrading to a high-efficiency air conditioner. These improvements can reduce utility bills, improve the value of the property, create new jobs, and deliver efficiency to the utility, which works to lower energy bills for everyone and reduce pollution. Because efficiency delivers so much value, many cities, states, and utilities are seeking innovative ways to help customers invest to improve the efficiency of houses and buildings.

The potential of on-bill programs to enable efficiency investments has persuaded many utilities, regulators, and other stakeholders to explore whether to implement new on-bill programs, expand existing programs with more funding, and recruit financial institutions and other investors to potentially fund on-bill loans.

The purpose of this issue brief is to explain why on-bill programs are promising and to describe key benefits and challenges utilities and other program administrators should consider when exploring an on-bill program. By taking stock of these considerations on-bill programs may be tailored to the customers most likely to use them to invest in efficiency and operated in a way likely to provide cost-effective efficiency for the utility and its customers.

WHAT IS ON-BILL FINANCING?

On-bill financing refers to a loan made to a utility customer—such as a homeowner or a commercial building owner—to pay for energy efficiency improvements to the customer's house or building. The regular monthly loan payments are collected by the utility on the utility bill until the loan is repaid.

On-bill programs have been used by U.S. utilities for many years.[1] National Grid has offered an on-bill program for small business customers since the 1990s. United Illuminating in Connecticut offers on-bill loans to commercial customers. San Diego Gas & Electric, SoCalGas, SoCal Edison and Pacific Gas and Electric all operate similar on-bill loan programs for commercial customers. New York State passed the Power NY Act in 2011 authorizing residential on-bill loans, which is being implemented by the New York State Energy Research Authority (NYSERDA) in cooperation with New York utilities.

An on-bill program may be administered by the utility directly or by a state energy office or other similar entity in conjunction with the utility.[2] New York's program, for example, is administered by the New York State Energy Research Authority (NYSERDA) in cooperation with New York utilities.

A program could be limited to particular types of customers, such as commercial building owners, commercial tenants, residential homeowners, or could include them all.

In most on-bill programs, the loan funds are provided directly by the utility or program administrator and the repayment risk is held by the same entity. One possibility is for an outside lender such as a financial institution to originate and fund the on-bill loans, while the utility would provide certain payment processing and servicing functions. This arrangement could present many advantages, but it also raises additional questions (discussed further below). This type of arrangement has received considerable attention recently, and some have deemed the arrangement "on-bill repayment" instead of "on-bill financing" to distinguish the two types of program structures. [3]

A New Kind of Loan

Today, conventional lenders and financial institutions offer loan products that many homeowners and building owners could use to finance efficiency improvements. The purpose of an on-bill program is not for the utility to serve as an additional source of capital for conventional loans. Rather, on-bill loans are different from conventional loans in two fundamental and important ways:

- **The loans are tied to utility service.** In many on-bill programs, the utility may suspend service to the customer for non-payment of the loan payment.[4] The threat of utility disconnection is likely to be a strong motivator for customers to make regular loan payments.
- **The loans account for the borrower's utility savings.** Many on-bill programs require customers meet a bill neutrality test to be eligible for financing. This means an energy auditor reviews the efficiency improvements and estimates the reduction in utility expenses expected after the project. The expected savings must equal or exceed the new on-bill loan payments to be eligible for an on-bill loan. The idea is that the utility will only make loans to customers whose total utility bill after the project, including the new loan payment, according to the model, will be reduced on an annual basis. Conventional lenders typically do not assess or consider the expected savings on utility bills from a project, making efficiency projects appear in every case to be additive to total expenses.[5]

ADVANTAGE: BROADER CUSTOMER ELIGIBILITY

These two unique features of on-bill loans—the tie to utility service and the bill neutrality test—should generally work to improve the likelihood of repayment and reduce risk of loss for a lender, relative to similar loans without such features.[6] Supporters of on-bill programs argue this will enable utilities to extend credit to certain customers who would not otherwise be eligible for conventional financing without assuming undue repayment risk, especially if other creditworthiness factors for eligibility are used, such as traditional cash flow analysis, evidence of performance on other debt obligations, credit scores, and on-time utility payment history.

For example, many customers are not eligible for conventional loans due to factors such as having limited assets, being an unrated commercial entity, not having available property for security, or not having sufficient equity in the property to support a secured mortgage. In many instances, customers ineligible for a conventional loan will be a good repayment risk because because of bill neutrality and because the payment is billed on the utility bill. Results to date from existing programs suggest on-bill loan programs do, in fact, produce loans with low default and delinquency rates, as indicated by the results of the California program.[7]

By enabling efficiency projects to customers who otherwise would not have access to conventional loans, a utility can most directly achieve the core purpose of the program: increasing efficiency improvement projects among customers.

For Institutional Customers, a New Option to Invest in Efficiency

Many schools, local governments, state governments, and other institutions own or operate large amounts of building space and have substantial opportunities for efficiency. For many institutions, funding capital improvements through budget expenditure or other debt can require lengthy and burdensome processes. Many institutions have policies that permit participation in utility operated on-bill programs because of the utility's unique position and role in evaluating the legitimacy of the project and determining that energy savings are likely to exceed the associated payment. The Federal Energy Management Program also has issued specific guidance related to participating in utility programs with certain features to make improvements.[8] The availability of on-bill programs may enable some institutional customers to implement efficiency projects that would otherwise go unrealized.

Advantage: Aligning Owner and Tenant

In many buildings, the cost of utility services are borne by tenants, either directly with separate utility meters or indirectly with the owner passing charges on to tenants based on square footage or some other formula. This is true of many commercial office buildings and multi-family buildings. The tenants collectively realize the diffused benefits of efficiency improvements to central systems and building features, but the owner typically bears the concentrated cost of those improvements. This works to discourage the owner from making sensible investments in efficiency. With an on-bill arrangement, some building owners will be in a position to invest in improvements if the monthly on-bill charge is passed to the tenants, because the benefits of the improvements—lower energy usage—will also be realized by the tenants.

Commercial tenants, if targeted at the time of build-out, could be well-positioned to invest in efficiency with an on-bill program. Many tenants with multi-year leases

in commercial buildings have strong economic interest in improving the efficiency of the space and the building. And, even if a tenant has access to funds internally or from conventional credit, investing in the efficiency project would compete with internal uses for the same funds. Since repayment is on the utility bill and the loan proceeds may only be used for an eligible efficiency project, an efficiency investment may not be seen by the customer as competing with other uses for the funds.

Direct Advantages and Market Transformation

By extending credit to customers, an on-bill program can achieve direct results in terms of implemented efficiency. There is also significant potential through market transformation–the important effect achieved over time by demonstrating to conventional lenders the market advantages of supporting energy efficiency lending products. Strong loan performance among on-bill loans, along with other program information, could potentially persuade some conventional lenders to account for energy savings in the underwriting process and to offer a loan product tailored to fund efficiency projects, without large amounts of utility or public contributions. As with any new class of loans, private investors who fuel lender activity through secondary markets are likely to require information on a large number of loans, seasoned over years, to identify the many lending parameters and underwriting terms that will produce a flow of loans with regular, predictable performance.[9] In addition ratings from recognized agencies are often required to make substantial investments. It is a process that could require a long period of examination. Nonetheless, the market transformation potential of on-bill programs should be considered and valued in the program design process. There is promising evidence that this process is underway for on-bill loans,[10] because of the leadership of the several utilities with active programs.

Recruiting Lenders to Participate

Utilities and program administrators should actively explore ways for lenders to participate in on-bill programs. A private lender such as a financial institution, working with a utility, could potentially contribute value to an on-bill program, and participation can speed the market transformation process described above.

One interesting possibility is for private lenders to fund the on-bill loans directly, or purchase the loans from the utility after funding, with the utility providing the payment processing and servicing functions required for the loans to have the on-bill payment feature.[11] Enthusiasm for lenders to fund on-bill loans arises out of the possibility that lenders could cultivate a secondary market among private investors for on-bill loans, which would increase the number of loans an on-bill program could facilitate and free utilities from funding loans.

It is not yet clear, however, what terms and conditions lenders and investors would require in order to purchase or fund on-bill loans, or what level of utility or public contribution would be required to bring customer finance charges to the level needed for customer participation in different customer and property sectors.[12] One possibility is to provide a lender a credit enhancement, such as a commitment to cover a certain percentage of losses, from the utility or another entity in order to enable lender participation. Ultimately, factors related to cost-effectiveness, described below, are likely to be important considerations.

While lenders could bring expertise to an on-bill program, it is worth noting a utility may be able to perform certain loan-related functions more effectively than a traditional lender, suggesting the two entities working together could produce a better loan product than either alone. Consider a utility's advantage in:

- Assessing the energy savings potential of a proposed efficiency project, or reviewing an assessment for validity
- Managing a vendor network of efficiency contractors, such as air conditioning and heating installers and energy modelers
- Using a customer's utility bill payment history in credit underwriting
- Targeting marketing of efficiency services and related financing using utility data.[13]

KEY CHALLENGES TO CONSIDER

Operating an on-bill program requires the utility or other program administrator to manage the financial aspects of holding loan risk—funding loans, repayment and prepayment speeds, delinquencies and defaults, interest-rate risk, among others. It will also require substantial operational efforts—people, systems, and processes to originate and service loans. The challenges are manageable, as demonstrated by the utilities with existing programs, but it is important for program design to consider how each function will be performed, by whom, with which tools, and how quality will be assured. The challenges also may inform program limitations because the challenges for some utilities might be may vary by property and customer sectors.

Even if a utility opts to work with a private lender to handle certain loan origination and back-office functions, either on a contract basis or as the funder and holder of the loan, the utility will likely want to remain involved in the origination process, even if only a quality assurance role, if its brand is involved, especially if termination of utility service is possible for non-payment of the loan.

Key operational challenges for utilities or loan administrators to consider include:

- **Loan Production.** Finding qualified customers, determining ability to pay, and managing loan documents, and delivering funds can be a labor intensive and

expensive process. It is likely that loan production will be substantially more challenging and riskier in the residential sector given the scale and number of applications that do not result in closed loans.[14]

- **Managing Contractor Network.** Contractors often actively help customers navigate financing options to fund proposed projects, sometimes in ways not apparent to the lender. This function can provide substantial value to the lender as a marketing channel, but it also presents risks. The experience of residential home improvement lenders suggests on-bill programs must guard against customers being subject to pressured sales tactics or having mistaken impressions of loan terms when contractors may be part of the sales activity.[15] The risks appear to be lower in the commercial property sector due to the nature of the customer and the role of professional building managers.
- **Legal Compliance.** Lending is governed by a complex web of state and federal legal and regulatory requirements. Compliance can be particularly challenging in the residential property sector—the Truth in Lending Act, Equal Credit Opportunity Act, Real Estate Settlement Procedures Act, state and federal licensing requirements, plus licensing of loan officers, among other requirements, could apply. Some statutory requirements might not apply to on-bill loans if the loans are not secured by a lien on real property. A loan operation will still raise a number of compliance questions and liability concerns that require ongoing and active management by the utility and could affect the terms of the product.[16]
- **Customer Shut-Off.** A utility must maintain even higher and more careful controls and processes related to customer service shut-off when it is related to non-payment of a loan payment. Customers must be able to obtain assistance with complaints, raise legitimate defenses related to the loan and the project funded by the loan, and have access to a dispute-resolution process that does not involve the customer incurring legal expenses. A few instances of customer service shut-off where the customer is in a sympathetic position, such as a person on fixed income with higher total bills after efficiency improvements, could create substantial problems for the utility, any lender involved, and efficiency programs generally.

OPEN QUESTIONS TO WATCH

Exploration of on-bill programs at utilities and with their regulators must include a range of issues in addition to the strictly operational challenges. The following points are frequently part of the discussion and will require attention and care in program design and implementation:

1. Cost Effectiveness

A utility's fundamental purpose in operating or supporting an on-bill program is to enable more customers to implement energy efficiency measures. Since utilities have many possible efficiency programs, it is important to assess the cost of obtaining efficiency through various programs in order to allocate resources effectively. The cost of operating a program and the efficiency produced are central inputs and should be addressed periodically. These values can be difficult to estimate in advance, although information from other programs can be instructive. Important other variables will include the customer and property types targeted, the amount of the utility or other contribution to reduce finance charges, and the value of market transformation encouraged through the participation of lenders.

2. Consumer Finance Charges

Some advocates argue that the finance charges for on-bill loans will be materially lower than those for traditional sources of credit because of the attributes of on-bill loans that might reduce delinquencies and defaults. Above, this paper argued that those advantages could be used to extend credit to customers who would not otherwise be eligible for conventional loans.

Two additional points bear consideration when assessing this question: First, any reduction in finance charges will take time to materialize after loan performance is proven by actual programs. Second, finance charges are composed of many lender expenses in addition to the costs associated with delinquencies and defaults. Other inputs include at least the cost of loan origination for the lender, the cost of capital for the lender, and cost of loan related services such as obtaining energy audits to assess the energy savings associated with the loan. Even if loan performance of the class of loans is substantially better, it can be expected to have a limited impact on the total customer finance charges.

3. "Stay with the Meter"

New York's on-bill program, implemented in 2012 for residential customers, includes a feature described as "stay with the meter," and the California Public Utility Commission has explored a similar feature for utility on-bill programs.[17] This means that the owner of a house or building, after obtaining an on-bill loan, may sell the property and not pay-off the on-bill loan. The owner would have no continuing liability for the unpaid loan balance after property sale (except for monthly payments missed prior to the sale). Instead, the unpaid loan balance would be automatically "assumed by" (or assigned to) the new property owner when he or she obtains utility service. The new utility customer would be obligated to make the remaining payments or risk losing utility service.[17] Some also call this a "tariff based" loan.

Advocates argue the "stay with the meter" feature will add value for the lender because in the event of delinquency or default the lender could expect to recover some or all of any unpaid loan balance at the time the home is sold or in regular monthly payments made by the next property owner, who is likely to need utility service to occupy or use the property. Even in the event of bankruptcy of the borrower or foreclosure of the primary-lien mortgage, the subsequent property owner would be expected to repay the unpaid loan balance on the on-bill loan. In contrast, the holder of a subordinate-lien loan is typically wiped-out in bankruptcy

and left with an unsecured claim against the borrower after a home sale for less than the amount of the primary mortgage or after foreclosure.

While the ability to recover unpaid balance following a foreclosure or sale of the home can be viewed as a benefit to the on-bill lender, it raises substantial and difficult questions for the holder of the primary mortgage and other participants in the mortgage transaction, for both residential and commercial properties.[18]

Results from on-bill programs with a "stay with the meter" feature will be useful to help utilities and other stakeholders understand and address the questions raised in the residential and commercial property sectors. Until meaningful results are available, it is important for any utility considering a "stay with the meter" feature to work closely with the real estate finance industry in program design so that any on-bill loan will dovetail with other real estate financing functions and interests.[19]

Since the fundamental goal of on-bill programs is to enable property owners to invest in efficiency improvements, it is important to assure that owners may obtain financing in the program without jeopardizing their interests under conventional mortgages or at time of property sale.

4. Borrower Ability to Pay

The "bill neutrality" test means the expected reduction in energy expenses after the efficiency improvements is modeled by an energy auditor, and the modeled reduction in expenses must equal or exceed the on-bill loan payments. If the energy estimate is correct, the customer's net cash flow will improve after the taking the loan, all other things equal.

The value of bill neutrality should be seen most powerfully across a portfolio of loans. A program with a bill neutrality requirement should produce a portfolio with considerably better credit risk profile than a pool of traditional loans with similar credit metrics (e.g., credit score, loan amount, property type) because in traditional loans, the new loan payment increases the overall debt load of the borrower.

On an individual basis, however, caution is warranted. The energy expense estimate is based on averages and assumptions about the house or building, past usage patterns, rate structure, and many other factors. A given customer implementing efficiency measures may have higher savings or lower savings depending on many variables. Moreover, reducing the uncertainty of any energy audit increases the cost of the audit, which is part of the cost of the loan program.

Bill neutrality requirements do not mean that every individual customer will have lower total payments after a funded efficiency project, and it is not a substitute for testing the customer's ability to pay the loan.[20] An on-bill program must still determine how to assess the borrower's ability to pay. This concern is especially important in the residential sector.

Some advocates argue this risk can be addressed by discounting the expected savings. That is, a project would meet a bill neutrality test after reducing the estimated energy savings by 20 percent. While this approach will reduce the likelihood an individual will experience an increase in total expenses after the improvements, it works to reduce the number of eligible projects.

5. Labels: "Debt" or "Tariff"?

Determining whether monthly on-bill payments are debt, a utility charge, or another kind of obligation for the customer might have important consequences to certain customers. The question is relevant, for example, to a company with an obligation under a financing agreement that would be triggered by undertaking a new debt obligation.

This determination will likely be based upon the nature of the obligation itself and whether it has the attributes of debt, not by whether the utility or others label it a loan payment, debt, service charge, or tariff.[21] The determination might also vary depending on the customer type, the terms of the on-bill program, and the terms of any agreement between the building owner and other vendors involved.

ANALYSIS & CONCLUSION

There is good reason to be enthusiastic about the promise of on-bill programs to enable customers to finance significant new efficiency investments, especially for certain classes of customers. For many customers, such as city governments, schools, small businesses with a good payment history, and commercial tenants at time of build out, conventional financing for efficiency improvements might be difficult to obtain. Many of these customers may be good risks in light of the unique attributes of on-bill loans. For residential customers, on-bill financing could demonstrate the merit of a lending model that accounts for energy expenses.

At the same time, operating an on-bill program will bring challenges and risks for utilities or other program administrators. For one, there might be good reasons certain customers are not eligible for loans from conventional lenders. Identifying customers that are good credit risks and with eligible efficiency projects is not a traditional utility function. Managing these challenges will require people, processes, and systems, and the mechanics must be considered in advance and in program design.

Program designers and other stakeholders should also consider the following specific points:

- On-bill financing for commercial and institutional customers appears to require fewer operational burdens for the utility or other program administrator. For a utility without an existing program, this sector may be a good place to start. Existing on-bill programs (specifically, in California and Connecticut) may offer guidance for how to operate such a program. Because the loan amounts are likely to be larger and the number of loans fewer, certain functions might be handled manually on an individual basis until the program is large enough to warrant investment in systems.
- Results from the New York residential on-bill program, launched in 2012, will be very useful to understand how an on-bill program can be offered to single-family residential

customers at scale. The results should also help to address open questions related to cost-effectiveness. Any utility interested in exploring a residential on-bill program should seek to obtain program results when available.

- Financial institutions working with utilities could deliver advantages, and programs should actively look for opportunities to enable lenders to participate to gain familiarity with the program guidelines related to efficiency and to obtain information on loan applicants and borrowers that could be useful to deepen the participation and potentially fund on-bill loans.
- Any new program should explore how existing on-bill programs handle operational issues likely to be present in the new program.[22]

On-bill loans can provide customers with access to credit for efficiency improvement projects, and the attributes of these loans suggest they can enable efficiency projects that might not occur otherwise. With attention to the benefits and challenges of on-bill programs, utilities will be able to realize cost-effective energy efficiency results and help their customers to invest in improving their buildings.

Endnotes

1 See "On-Bill Financing for Energy Efficiency Improvements: A Review of Current Program Challenges, Opportunities, and Best Practices," Catherine J. Bell, Steven Nadel, Sara Hayes, American Council for an Energy-Efficient Economy, December, 2011. Outside of the U.S., the UK Department of Energy & Climate Change has announced plans to implement an on-bill program as part of the "Green Deal." See http://www.decc.gov.uk.

2 In this paper, I refer to a "utility" as the implementing and operating entity only for the sake of brevity.

3 See Copithorne and Fine, Environmental Defense Fund, Unlocking the Energy Efficiency Puzzle in California, 2011. (located at: www.edf.org).

4 For example, California's non-residential programs and New York's residential program include shut-off.

5 There are other forms of financing that rely on a customer's expected utility bill savings to assess a loan applicant's income, including Energy Services Agreements, PACE, and other specialized products. The approach also bears a resemblance to traditional construction financing that is made based upon the appraised value of the property after or "subject to" the funded improvements.

6 It is important to note that because on-bill loans are not secured by property that could reduce losses in the event of default, the cost of a single default could be substantial.

7 How expected energy savings will relate to credit risk is likely to depend on many factors, but the results of delinquencies and defaults in existing commercial on-bill programs are very promising. According to a presentation by Frank Spasaro of Southern California Gas Company, the four large California investor-owned utilities have made about 1,241 on bill loans (~$31 million in principal) to commercial and institutional customers and have had a total of 14 defaults with a total balance of $170,000. See Presentation by Frank Spasaro, February 8, 2012, PUC Energy Efficiency Financing Workshop, Day 1 Materials, located at: http://www.cpuc.ca.gov/PUC/energy/Energy+Efficiency.

8 See requirements located at http://www1.eere.energy.gov/femp/financing/uescs.html.

9 Operational terms such as credit scores parameters, how to test income and cash flow, and how to account for energy audit predictions.

10 NYSERDA, for example, began in 2012 to make loans to residential homeowners with an on-bill arrangement with the utilities operating in New York State and reportedly is planning to sell or securitize the loans using a bond structure. See NYSERDA Request for Proposals for Investment Banking and Underwriting Services, RFP 2459, January, 2012. The state of Pennsylvania operates an efficiency loan program that could produce evidence to bolster the case regarding the performance of efficiency loans relative to a pool of traditional home improvement loans. See Presentation titled "WHEEL: A Sustainable Solution for Residential Energy Efficiency," located at: http://www.naseo.org/committees/financing/documents/WHEEL_Primer.pdf.

11 See Copithorne and Fine, EDF paper, cited at note 3.

12 There are also political questions related to whether utility service shut-off is appropriate for a loan held by a non-utility lender, especially for low and moderate income residents. See Comments of the National Consumer Law Center (NCLC) on the Administrative Law Judge's Ruling Regarding Energy Efficiency Financing, Rulemaking 09-11-014, February 22, 2012. (Located at: http://docs.cpuc.ca.gov/efile/CM/160701.pdf); and, Reply Comments of NCLC Rulemaking 09-11-014, February 29, 2012 (located at: http://docs.cpuc.ca.gov/efile/CM/160788.pdf).

13 There is promising evidence that diagnostics regarding major systems can be obtained from utility meter data

14 The level of work will depend on factors such as marketing environment, whether loans are secured, customer type, regulatory requirements, and investor requirements, if any. In addition, typical origination functions include taking an application for credit, obtaining information on the borrower, such as credit history and verifying identity, obtaining information on the property, obtaining information on the project to be funded (the improvements), reviewing an energy estimate of the property, underwriting borrower income, expenses, and affordability of new loan payment, and more.

15 In many states a customer may raise claims against a lender (or other "holder" of the loan) that it could raise against the contractor (e.g., for negligent work or deception) in certain situations. See Federal Trade Commission's Holder-in-Due-Course rules (16 CFR Part 433).

16 To operate current on-bill programs for commercial customers, California utilities reportedly offer loans at zero-percent interest and no fees in order to avoid triggering certain state licensing requirements. See Cal. Admin, Law Judge's Proposed Decision, CPUC Order Instituting Rulemaking to Examine the Commission's Post-2008 Energy Efficiency Policies, Programs, Evaluation, Measurement and Verification, and Related Issues. Rulemaking 09-11-014, (Filed November 20, 2009).

17 See The Power NY Act of 2011 (A. 8510/S. 5844). See Cal. Admin. Law Judge's Proposed Decision cited at note 17.

18 It is possible that mortgage lenders generally or title insurers would require as a condition of a property purchase/sale that any open on-bill loan balance is paid-off from the proceeds of the sale so that the purchaser takes the property "free and clear" of encumbrances.

19 The questions raised by the stay-with-the-meter feature resemble questions raised by PACE programs, which also have attributes that enable a lender to recover some or all of a loan balance following foreclosure of a prior recorded mortgage loan. See Notice of Proposed Rulemaking, Federal Housing Finance Agency, Federal Register, Vol. 77, No. 116, pg 36086, June 15, 2012. Also see Comments filed by NRDC, related to the Advance Notice of Proposed Rulemaking, located here: www.fhfa.gov/webfiles/23776/344_Natural_Resources_Defense_Council.pdf. Questions are also present with commercial property, as commercial mortgage lenders commonly require borrowers to commit in the loan documents to not encumber the property with additional financial obligations.

20 Key parties to consult include mortgage lenders, investors, and insurers, (for both residential and commercial loans), property appraisers, real estate brokers, and title insurers.

21 Another risk is that some customers could make changes to the house or building at the same time as changes funded by the on-bill program, but which are not part of the energy audit, such as increasing occupancy of a commercial space, or adding new appliances in a renovated house. These risks appear manageable across a program portfolio of loans but could affect any individuals estimated savings.

22 See Financial Accounting Standards Board, Statement of Financial Accounting Concepts No. 8 September, 2010 (at BC3.26 "Substance over form").